PS Ref. No.: 1032.006194 (IBMK10194)

IN THE CLAIMS:

Please cancel claim 26 and amend the claims as follows:

 (Currently Amended) A method of processing messages, comprising: receiving, at a socket configured for a server application executing on a computer, data from a remote source via a network connection prior to allocating a buffer to contain the data; and subsequently:

determining a mode to obtain the buffer according to a buffer mode parameter supplied with a receive operation call, wherein the buffer mode parameter indicates a buffer acquisition method for acquiring a buffer to contain the data received from a remote source via the network connection;

obtaining the buffer according to the buffer acquisition method, wherein the obtained buffer is sized exactly to the size of the data received from the remote source; and

allocating the obtained buffer, wherein allocating the obtained buffer is

dependent on a value of the buffer mode parameter and comprises one of:

allocating the buffer from an application-supplied storage owned by the

sockets server application when the buffer mode parameter has a first value; and

allocating the buffer from a system-supplied storage not owned by the

sockets server application when the buffer mode parameter has a second value.

- 2. (Original) The method of claim 1, wherein the messages are client-server messages.
- 3. (Original) The method of claim 1, wherein the data is received over a sockets streaming protocol.
- 4. (Canceled)
- 5. (Previously Presented) The method of claim 1, wherein the allocating is performed in response to a buffer request from the socket.

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6. (Previously Presented) The method of claim 1, wherein the network connection is a Transport Control Protocol/Internet Protocol (TCP/IP) connection.

- 7. (Original) The method of claim 1, wherein allocating the buffer comprises: processing a buffer request from a sockets layer after receiving the data; and providing the buffer to the sockets layer.
- 8. (Canceled)
- 9. (Currently Amended) A tangible computer readable medium containing a program which, when executed by a computer, performs operations for processing messages, the operations comprising:

processing an input operation issued from a sockets server application to a sockets layer of the computer, wherein the input operation is configured with a buffer mode parameter indicating to the sockets layer a buffer acquisition method for acquiring a buffer for containing data received from a remote source via a network connection; receiving the data from the remote source via the network connection;

subsequently, obtaining the buffer according to the buffer acquisition method, wherein the obtained buffer is sized exactly to the size of the data received from the remote source; and

allocating the obtained buffer, wherein allocating the obtained buffer is dependent on a value of the buffer mode parameter and comprises one of:

allocating the buffer from an application-supplied storage owned by the sockets server application when the buffer mode parameter has a first value; and

allocating the buffer from a system-supplied storage not owned by the sockets server application when the buffer mode parameter has a second value.

10. (Previously Presented) The tangible computer readable medium of claim 9, wherein the messages are client-server messages.

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11. (Previously Presented) The tangible computer readable medium of claim 9, wherein the data is received over a sockets streaming protocol.

- 12. (Previously Presented) The tangible computer readable medium of claim 9, wherein the input operation is further configured with a record definition specifying to the sockets layer a format of the data.
- 13. (Canceled)
- 14. (Previously Presented) The tangible computer readable medium of claim 10, wherein the allocation is performed by one of the sockets server application and the sockets layer.
- 15. (Previously Presented) The tangible computer readable medium of claim 10, wherein the buffer is allocated from one of:

storage owned by the sockets server application; and system-supplied storage not owned by the sockets server application.

- 16. (Canceled)
- 17. (Previously Presented) The computer tangible readable medium of claim 10, wherein allocating the buffer comprises executing a callback function provided by the sockets server application with an instruction to allocate the buffer.
- 18. (Previously Presented) The tangible computer readable medium of claim 10, wherein the allocating is performed in response to a buffer request made by the sockets layer.
- 19. (Previously Presented) The tangible computer readable medium of claim 9, further comprising:

if the buffer is large enough to contain the data, copying the data into a previously allocated buffer provided to the sockets layer with the input operation; and

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if the previously allocated buffer is not large enough to contain the data, requesting a larger buffer sufficient to contain the data in accordance with the buffer acquisition method.

20. (Currently Amended) A system in a distributed environment, comprising: a network interface configured to support a network connection with at least one other computer in the distributed environment;

a memory comprising a sockets server application, a socket in communication with the sockets server application and a protocol stack in communication with the socket, wherein the protocol stack is configured to transport messages between the network interface and the socket;

a processor configured to perform operations for processing messages, the operations comprising:

processing an input operation issued from the sockets server application to the socket, wherein the input operation is configured with a buffer mode parameter indicating to the socket a buffer acquisition method for acquiring a buffer for containing data received from the at least one other computer; and receiving the data;

subsequently, obtaining the buffer according to the buffer acquisition method, wherein the obtained buffer is sized exactly to the size of the data received from the remote source; and

allocating the obtained buffer; and

an application-supplied storage owned by the sockets server application and a system-supplied storage not owned by the sockets server application, and wherein allocating the obtained buffer is dependent on a value of the buffer mode parameter and comprises one of:

allocating the buffer from the application-supplied storage when the buffer mode parameter has a first value; and

allocating the buffer from the system-supplied storage when the buffer mode parameter has a second value.

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- 21. (Original) The system of claim 20, wherein the messages are client-server messages.
- 22. (Original) The system of claim 20, wherein the protocol stack is configured for a sockets streaming protocol.
- 23. (Original) The system of claim 20, wherein the memory comprises record definition specifying to the socket a format of the data.
- 24. (Canceled)
- 25. (Previously Presented) The system of claim 20, wherein the allocation is performed by one of the sockets server application and the socket.
- 26. (Cancelled)
- 27. (Canceled)
- 28. (Previously Presented) The system of claim 20, wherein allocating the buffer comprises executing a callback function provided by the sockets server application with an instruction to allocate the buffer.
- 29. (Previously Presented) The system of claim 20, wherein the allocating is performed in response to a buffer request made by the socket.
- 30. (Canceled)